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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO.       |
|---|-------------|----------------------|----------------------------|------------------------|
| 10/531,830  | 04/18/2005  | Erwin Hacker         | 514413-3952                | 2047                   |
| 7590<br>William F Lawrence<br>Frommer Lawrence & Haug<br>745 Fifth Avenue<br>New York, NY 10151 | 01/24/2008  |                      | EXAMINER<br>CHUI, MEI PING |                        |
|   |             |                      | ART UNIT<br>1616           | PAPER NUMBER           |
|   |             |                      | MAIL DATE<br>01/24/2008    | DELIVERY MODE<br>PAPER |

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

|                              |                     |               |
|------------------------------|---------------------|---------------|
| <b>Office Action Summary</b> | Application No.     | Applicant(s)  |
|                              | 10/531,830          | HACKER ET AL. |
|                              | Examiner            | Art Unit      |
|                              | Helen Mei-Ping Chui | 1616          |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on 18 April 2005.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-10 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-10 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/ are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    - Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    - Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date 04/18/2005.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### *Status of Action*

The Examiner acknowledges receipt of application number 10/531,830 filed on 04/18/2005. Claims 1-10 are presented for examination on the merits for patentability.

### *Status of Claims*

Accordingly, claims 1-10 are presented for examination on the merits for patentability.

### *Claim Rejections - 35 USC § 112 second paragraph*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

**Claims 1-7 and 10** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

(1) **Claims 1-7** provide for the use of a compound of formula (I), or a salt thereof, for increasing the weed control of one or more aryloxyphenoxypropionate herbicides (A) as recited

therein; but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced. See MPEP 2173.05(q).

**Claims 1-7** are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966). See MPEP 2173.05(q).

(2) **Claim 10** is rejected 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 10 improperly dependent on itself, thus rendering the claim indefinite.

*Notes to the Applicant*

It is noted to the Applicant that, for examination purpose, the examiner interprets claims 1-7, which have been rejected under 35 U.S.C. 112/101 set forth above, as a combination containing a compound of recited formula (I) and a recited aryloxyphenoxypropionate herbicide (A) for the following rejections.

Furthermore, for examination purpose, the examiner interprets claim 10, which has been rejected under 35 U.S.C. 112 second paragraph set forth above for being indefinite due to

Furthermore, for examination purpose, the examiner interprets claim 10, which has been rejected under 35 U.S.C. 112 second paragraph set forth above for being indefinite due to improperly dependent on itself, as the dependent claim depended from claim 1 instead of claim 10 for the following rejections.

***Claim Rejection - 35 U.S.C. § 102***

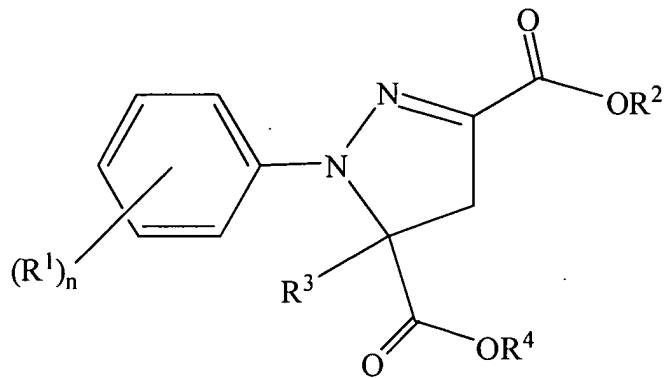
The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102(b) that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

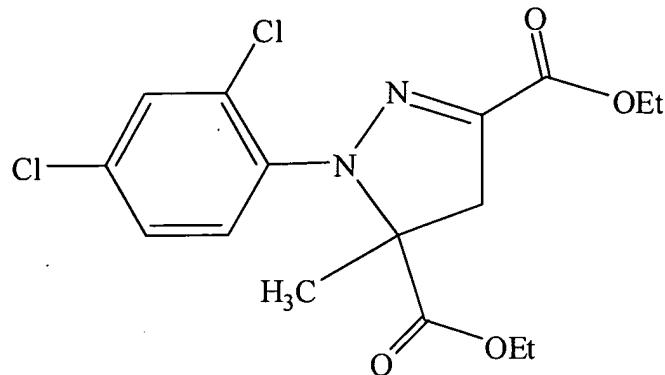
**Claims 1-7 and 10 are rejected under 35 U.S.C. 102(b) as being anticipated by Heinrich et al. (U. S. Patent No. 5,733,847).**

Applicants claim a herbicidal combination containing a compound of recited formula (I) (or named as compound B) and an aryloxyphenoxypropionate compound (A) as the herbicide, wherein the structure of formula (I), which  $R^1$  = halogen,  $R^2$  =  $C_1$ - $C_6$  alkyl,  $R^3$  =  $C_1$ - $C_6$  alkyl,  $R^4$  =  $C_1$ - $C_{12}$  alkyl, and  $n$  = an integer from 1 to 3, for example, is as below:



Heinrich et al. disclose a herbicidal composition comprising an active herbicide from the class of benzoxazolylloxyphenoxy carboxylic acid derivatives (column 2, line 40-43). Heinrich et al. also disclose that the active herbicide, i.e. fenoxaprop-ethyl or fenoxaprop-P-ethyl can be combined with crop-protecting agents, i.e. safeners, to give finished formulations that optimizing the spectrum of the herbicidal action (column 1, line 22-29 and column 6, Examples 1-5).

**With respect to claims 1-4, 7 and 10,** Heinrich et al. specifically disclose the herbicidal composition comprising ethyl 1-(2, 4-dichlorophenyl)-5-ethoxycarbonyl-5-methylpyrazoline-3-carboxylate as the safener (see **structure below**) and fenoxaprop-P-ethyl as the active herbicide (column 6, Examples 3-5):



It is noted that the substituent of ethyl 1-(2, 4-dichlorophenyl)-5-ethoxycarbonyl-5-methylpyrazoline-3-carboxylate disclose in Heinrich et al. corresponds to the substituent in the instant claims as follows:

| <u>Substituent (instant claims)</u> | <u>Substituent (Heinrich et al.)</u> |
|-------------------------------------|--------------------------------------|
| R <sup>1</sup>                      | 2-Cl and 4-Cl                        |
| R <sup>2</sup>                      | ethyl                                |
| R <sup>3</sup>                      | methyl                               |
| R <sup>4</sup>                      | ethyl                                |
| n                                   | 2                                    |

**With respect to claim 5,** it is also noted that the crop-protecting safener ethyl 1-(2, 4-dichlorophenyl)-5-ethoxycarbonyl-5-methylpyrazoline-3-carboxylate discloses in Heinrich et al. is also known as mefenpyr-diethyl or diethyl (RS)-1-(2, 4-dichlorophenyl)-5-methyl-2-pyrazoline-3, 5-dicarboxylate, or diethyl 1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1*H*-pyrazole-3, 5-dicarboxylate. Therefore, instant claim 5 is anticipated.

**With respect to claim 6**, Heinrich et al. further disclose that the combination comprises fenoxaprop-P-ethyl (herbicide compound A) and ethyl 1-(2, 4-dichlorophenyl)-5-ethoxycarbonyl-5-methylpyrazoline-3-carboxylate (safener compound B) in a weight ratio of 2:1 based on the % weight present in the combination (column 6, Examples 3-5). Therefore, instant claim 6 is anticipated.

**Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosch et al. (U. S. Patent No. 5,700,758).**

Applicants claim a herbicidal combination containing a compound of recited formula (I) (or named as compound B) and an aryloxyphenoxypropionate compound (A) as the herbicide, wherein the structure of formula (I) has been set forth above as:

$R^1$  = halogen or  $C_1$ - $C_4$  haloalkyl;

$R^2$  = hydrogen,  $(C_1$ - $C_6)$ -alkyl,  $(C_1$ - $C_4)$ -alkoxyl- $(C_1$ - $C_4)$ -alkyl,  $(C_3$ - $C_6)$ -cycloalkyl, tri( $C_1$ - $C_4$ )-alkyl silyl or tri( $C_1$ - $C_4$ )-alkyl silylmethyl;

$R^3$  = hydrogen,  $(C_1$ - $C_6)$ -alkyl,  $(C_1$ - $C_6)$ -haloalkyl,  $(C_2$ - $C_6)$ -alkenyl,  $(C_2$ - $C_6)$ -alkynyl or  $(C_3$ - $C_6)$ -cycloalkyl;

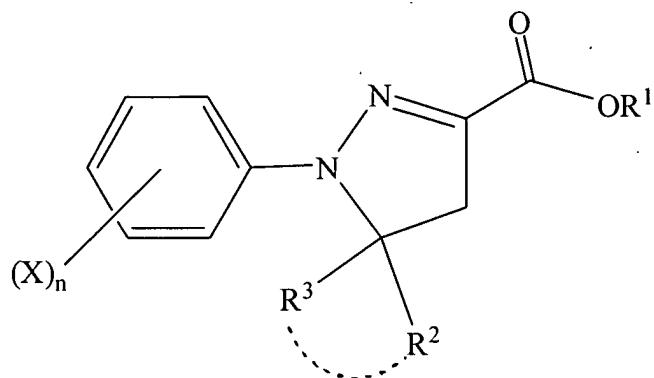
$R^4$  = hydrogen or  $(C_1$ - $C_{12}$ )-alkyl; and

$n$  = an integer from 1 to 3.

Rosch et al. disclose a compound of formula (I) that has the property of reducing or completely preventing phytotoxic secondary effects of herbicides when used in crops of useful

plants and a method of protecting crop plants against phytotoxic secondary effects of herbicides comprising treating the plants, seeds of the plants or areas under cultivation with mixture of a compound of the formula (I) and the herbicide before, after or simultaneously (column 3, line 48-61).

**With respect to claims 1, 4 and 7**, Rosch et al. disclose that the structure of compound of formula (I) as below:



wherein the substituent present in compound of formula (I), by Rosch et al., corresponds to the substituent present in the instant claims as follows:

| <u>Substituent (instant claims)</u> | <u>Substituent (Rosch et al.)</u> |
|-------------------------------------|-----------------------------------|
| R <sup>1</sup>                      | X                                 |
| R <sup>2</sup>                      | R <sup>1</sup>                    |
| R <sup>3</sup>                      | R <sup>2</sup> or R <sup>3</sup>  |
| CO <sub>2</sub> R <sup>4</sup>      | R <sup>2</sup> or R <sup>3</sup>  |
| n                                   | n                                 |

Rosch et al. disclose that the substituent **X** = radicals independently of one another are halogen or C<sub>1</sub>-C<sub>4</sub> haloalkyl; **R**<sup>1</sup> = C<sub>1</sub>-C<sub>6</sub>-alkyl, C<sub>3</sub>-C<sub>6</sub> cycloalkyl, tri(C<sub>1</sub>-C<sub>4</sub> alkyl)silyl, trimethylsilylmethyl or C<sub>1</sub>-C<sub>6</sub>-alkoxy-C<sub>1</sub>-C<sub>6</sub>-alkyl; **R**<sup>2</sup> and **R**<sup>3</sup> are independently hydrogen, C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub>-alkenyl, C<sub>2</sub>-C<sub>6</sub>-alkynyl, C<sub>3</sub>-C<sub>6</sub>-cycloalkyl, C<sub>1</sub>-C<sub>6</sub>-haloalkyl and C<sub>1</sub>-C<sub>12</sub> alkyl, and **n** = 1 to 3 (column 16, claim 1; column 19, claim 18 and column 20, claims 24-25). More specifically, **(X)**<sub>**n**</sub> = 2, 4-dichloro group, **R**<sup>1</sup> = ethyl group, **R**<sup>2</sup> = methyl group and **R**<sup>3</sup> = ethoxycarbonyl group (column 20, claim 28). Therefore, instant claims 1, 4 and 7 are anticipated.

**With respect to claims 2, 3 and 10,** Rosch et al. also disclose that the herbicidal combination for protecting crop plants against phytotoxic effects of herbicides, wherein the herbicide is fenoxaprop-ethyl or fenoxaprop-P-ethyl in combination with the compound of formula (I) (column 17, claims 10 and 14). Therefore, instant claims 2, 3 and 10 are anticipated.

**With respect to claim 5,** it is also noted that the crop-protecting safener ethyl 1-(2, 4-dichlorophenyl)-5-ethoxycarbonyl-5-methylpyrazoline-3-carboxylate discloses in Heinrich et al. is also known as mefenpyr-diethyl or diethyl (RS)-1-(2, 4-dichlorophenyl)-5-methyl-2-pyrazoline-3, 5-dicarboxylate, or diethyl 1-(2,4-dichlorophenyl)-4,5-dihydro-5-methyl-1*H*-pyrazole-3, 5-dicarboxylate. Therefore, instant claim 5 is anticipated.

**With respect to claim 6,** Rosch et al. also disclose that the combination of herbicide to safener present in a molar ratio between 10:1 and 1:10 (column 17, claim 7). Therefore, instant claim 6 is anticipated

**With respect to claim 8,** Rosch et al. disclose that applying the mixture of a herbicide, i.e. fenoxaprop-ethyl, and a safener, i.e. compound of formula (I), to crop plants reduce the crops damage, thus the mixture is suitable in an advantageous manner for the selective weed control of

crops, i.e. cereal crops (Example 1: column 11, line 66-67 d column 12, line 53). Therefore, instant claim 8 is anticipated

**With respect to claim 9**, Rosch et al. disclose the use of different herbicidal combination containing compound of formula (I), i.e. the structure with  $(X)_n = 2$ , 4-dichloro,  $R^1$ ,  $R^2$  and  $R^3 =$  ethyl, which is not mefenpyr-diethyl, in conjunction with the herbicide fenoxaprop-ethyl, which is different than fenoxaprop-P-ethyl (column 10, Table 1: Example 6; column 12, Table 2: see Example (H + 6) wherein H represents fenoxaprop-ethyl and 6 represents safener Example No. 6 in Table 1). Therefore, instant claim 9 is anticipated.

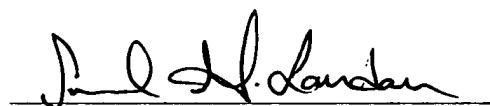
### *Conclusion*

No claims are allowed.

### *Contact Information*

Any inquiry concerning this communication from the Examiner should direct to Helen Mei-Ping Chui whose telephone number is 571-272-9078. The examiner can normally be reached on Monday-Friday (7:30 am – 5:00 pm). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where the application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either PRIVATE PAIR or PUBLIC PAIR. Status information for unpublished applications is available through PRIVATE PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the PRIVATE PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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